

60. A system of viewing video information stored on a removable high capacity storage medium, the system comprising:

an input device configured to read the video information from the high capacity storage medium, the video information stored on the high capacity storage medium having a digital audio component and a digital video component, the digital video component having an intermediate format having a frame rate of substantially 24 frames per second (fps),

the digital video component having been formed by converting input video information having an input format with no added redundant frames or fields;

a graphics processor in data communication with the input device and configured to convert the digital video component in its intermediate format to output video information in an output format, the output format having a frame rate that is greater than or equal to the frame rate of the intermediate format, the graphics processor further being capable of being in data communication with a display device for viewing the output video information in the output format.

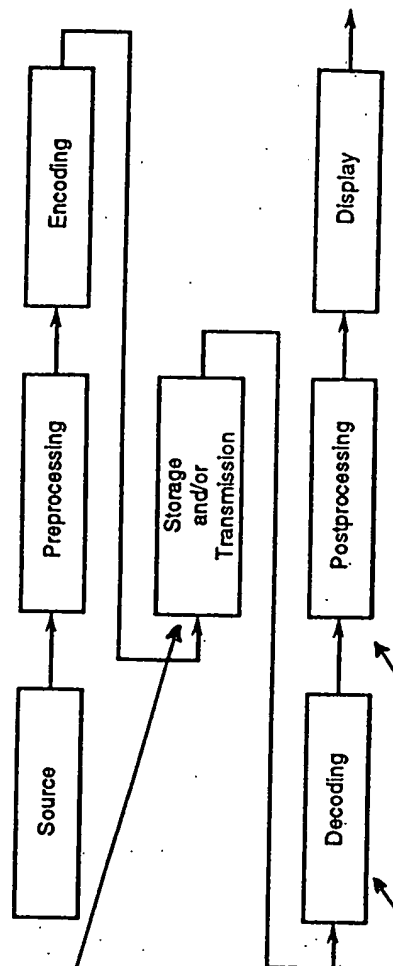


Figure D.1 -- Coding and decoding process

D.3.2 Conversion from film

If film material can be digitized at 24 pictures/s, then it forms an excellent source for an ISO/IEC 11172-2 bitstream. It may be digitized at the desired spatial resolution. The picture_rate field in the video sequence header, see 2.4.2.3, allows the picture rate of 24 pictures/s to be specified exactly.

D.8.2.2 Temporal resampling

Since the picture rates are limited to those commonly used in the television industry, the same techniques may be applied. For example, conversion from 24 pictures/s to 60 fields/s may be achieved by the technique of 3:2 pulldown.

Video coded at 23,976 or 24 pictures/s may be converted to 50 fields/s by speeding it up by about 4% and decoding it as if it had been encoded at 25 pictures/s. The decoded pictures could be displayed in the odd fields, and interpolated pictures in the even fields. The audio must be maintained in synchronization, either by increasing the pitch, or by speeding it up without a pitch change.